

AMENDMENTS TO THE CLAIMS

## 1. (Currently Amended) A method comprising:

in a global operating system environment controlled by a single operating system kernel instance, establishing a first non-global zone and a second non-global zone, wherein the first non-global zone has a unique first zone identifier and the second non-global zone has a unique second zone identifier;

receiving from a first process executing in association with the first non-global zone a request to create a first inter-process communications (IPC) object, wherein the first process provides a particular object identifier to be assigned to the first IPC object, and wherein the first process has the first zone identifier associated therewith;

creating a first IPC object, wherein the first zone identifier associated with the first process is associated with the particular object identifier to give rise to a first augmented identifier for the first IPC object;

receiving from a second process executing in association with the first non-global zone a request to ~~access an IPC object having the particular object identifier assigned thereto, wherein the second process provides the particular object identifier, and~~ initiate inter-process communication using a transport mechanism accessible by the first IPC object, wherein the second process has the first zone identifier associated therewith;

determining, based ~~upon the particular object identifier provided by the second process at least partially upon the transport mechanism requested by the second process~~ and the first zone identifier associated with the second process, that the second process is requesting access to the first IPC object;

permitting the second process to access the first IPC object to communicate with the first process;

receiving from a third process executing in association with the second non-global zone a request to create a second IPC object, wherein the third process provides the same particular object identifier to be assigned to the second IPC object, and wherein the third process has the second zone identifier associated therewith;

creating a second IPC object, wherein the second zone identifier associated with the third process is associated with the particular object identifier to give rise to a second augmented identifier for the second IPC object;

receiving from a fourth process executing in association with the second non-global zone a request to ~~access an IPC object having the particular object identifier assigned thereto, wherein the fourth process provides the particular object identifier, and~~ initiate inter-process communication using a transport mechanism accessible by the second IPC object, wherein the fourth process has the second zone identifier associated therewith;

determining, based ~~upon the particular object identifier provided by the fourth process~~ at least partially upon the transport mechanism requested by the fourth process and the second zone identifier associated with the fourth process, that the fourth process is requesting access to the second IPC object; and

permitting the fourth process to access the second IPC object to communicate with the third process;

thereby enabling processes in the first non-global zone and the second non-global zone to use the same particular object identifier for inter-process communication without collision.

2-3. Canceled

4. (Previously Presented) The method of claim 1, wherein the particular object identifier comprises at least one of an address, a socket identifier, a port, a flex address, a semaphore identifier, a message queue identifier, a shared memory segment identifier, a pipe and a stream identifier.

5. (Previously Presented) The method of claim 1, wherein establishing the first non-global zone comprises:

creating the first non-global zone;

associating the first zone identifier with the first non-global zone; and

creating a data structure for managing information pertaining to IPC objects

associated with the first non-global zone.

6. Canceled

7. (Previously Presented) The method of claim 1, wherein the first IPC object comprises at least one of a loopback transport provider, a semaphore, a shared memory segment, a message queue and an event channel.

8-12. Canceled

13. (Currently Amended) A computer readable storage medium, comprising:  
instructions for causing one or more processors to establish, in a global operating system environment controlled by a single operating system kernel instance, a first non-

global zone and a second non-global zone, wherein the first non-global zone has a unique first zone identifier and the second non-global zone has a unique second zone identifier;

instructions for causing one or more processors to receive from a first process executing in association with the first non-global zone a request to create a first inter-process communications (IPC) object, wherein the first process provides a particular object identifier to be assigned to the first IPC object, and wherein the first process has the first zone identifier associated therewith;

instructions for causing one or more processors to create a first IPC object, wherein the first zone identifier associated with the first process is associated with the particular object identifier to give rise to a first augmented identifier for the first IPC object;

instructions for causing one or more processors to receive from a second process executing in association with the first non-global zone a request to ~~access an IPC object having the particular object identifier assigned thereto, wherein the second process provides the particular object identifier, and~~ initiate inter-process communication using a transport mechanism accessible by the first IPC object, wherein the second process has the first zone identifier associated therewith;

instructions for causing one or more processors to determine, based ~~upon the particular object identifier provided by the second process~~ at least partially upon the transport mechanism requested by the second process and the first zone identifier associated with the second process, that the second process is requesting access to the first IPC object;

instructions for causing one or more processors to permit the second process to access the first IPC object to communicate with the first process;

instructions for causing one or more processors to receive from a third process executing in association with the second non-global zone a request to create a second IPC

object, wherein the third process provides the same particular object identifier to be assigned to the second IPC object, and wherein the third process has the second zone identifier associated therewith;

instructions for causing one or more processors to create a second IPC object, wherein the second zone identifier associated with the third process is associated with the particular object identifier to give rise to a second augmented identifier for the second IPC object;

instructions for causing one or more processors to receive from a fourth process executing in association with the second non-global zone a request to ~~access an IPC object having the particular object identifier assigned thereto, wherein the fourth process provides the particular object identifier, and~~ initiate inter-process communication using a transport mechanism accessible by the second IPC object, wherein the fourth process has the second zone identifier associated therewith;

instructions for causing one or more processors to determine, based ~~upon the particular object identifier provided by the fourth process~~ at least partially upon the transport mechanism requested by the fourth process and the second zone identifier associated with the fourth process, that the fourth process is requesting access to the second IPC object; and

instructions for causing one or more processors to permit the fourth process to access the second IPC object to communicate with the third process;

thereby enabling processes in the first non-global zone and the second non-global zone to use the same particular object identifier for inter-process communication without collision.

14-15. Canceled

16. (Previously Presented) The computer readable storage medium of claim 13, wherein the particular object identifier comprises at least one of an address, a socket identifier, a port, a flex address, a semaphore identifier, a message queue identifier, a shared memory segment identifier, a pipe and a stream identifier.

17. (Previously Presented) The computer readable storage medium of claim 13, wherein the instructions for causing one or more processors to establish the first non-global zone comprises:

instructions for causing one or more processors to create the first non-global zone;

instructions for causing one or more processors to associate the first zone identifier with the first non-global zone; and

instructions for causing one or more processors to create a data structure for managing information pertaining to IPC objects associated with the first non-global zone.

18. Canceled

19. (Previously Presented) The computer readable storage medium of claim 13, wherein the first IPC object comprises at least one of a loopback transport provider, a semaphore, a shared memory segment, a message queue and an event channel.

20-24. Canceled

25. (Currently Amended) An apparatus, comprising:

means for establishing, in a global operating system environment controlled by a single operating system kernel instance, a first non-global zone and a second non-global zone, wherein the first non-global zone has a unique first zone identifier and the second non-global zone has a unique second zone identifier;

means for receiving from a first process executing in association with the first non-global zone a request to create a first inter-process communications (IPC) object, wherein the first process provides a particular object identifier to be assigned to the first IPC object, and wherein the first process has the first zone identifier associated therewith;

means for creating a first IPC object, wherein the first zone identifier associated with the first process is associated with the particular object identifier to give rise to a first augmented identifier for the first IPC object;

means for receiving from a second process executing in association with the first non-global zone a request to ~~access an IPC object having the particular object identifier assigned thereto, wherein the second process provides the particular object identifier, and~~ initiate inter-process communication using a transport mechanism accessible by the first IPC object, wherein the second process has the first zone identifier associated therewith;

means for determining, based ~~upon the particular object identifier provided by the second process~~ at least partially upon the transport mechanism requested by the second process and the first zone identifier associated with the second process, that the second process is requesting access to the first IPC object;

means for permitting the second process to access the first IPC object to communicate with the first process;

means for receiving from a third process executing in association with the second non-global zone a request to create a second IPC object, wherein the third process provides

the same particular object identifier to be assigned to the second IPC object, and wherein the third process has the second zone identifier associated therewith;

means for creating a second IPC object, wherein the second zone identifier associated with the third process is associated with the particular object identifier to give rise to a second augmented identifier for the second IPC object;

means for receiving from a fourth process executing in association with the second non-global zone a request to ~~access an IPC object having the particular object identifier assigned thereto, wherein the fourth process provides the particular object identifier, and~~ initiate inter-process communication using a transport mechanism accessible by the second IPC object, wherein the fourth process has the second zone identifier associated therewith;

means for determining, based ~~upon the particular object identifier provided by the fourth process~~ at least partially upon the transport mechanism requested by the fourth process and the second zone identifier associated with the fourth process, that the fourth process is requesting access to the second IPC object; and

means for permitting the fourth process to access the second IPC object to communicate with the third process;

thereby enabling processes in the first non-global zone and the second non-global zone to use the same particular object identifier for inter-process communication without collision.

26-28. Canceled